



# Australian Bureau of Statistics

## 6291.0.55.001 - Labour Force, Australia, Detailed - Electronic Delivery, Feb 2013

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 21/03/2013

### Summary

#### Main Features

Data from the monthly Labour Force Survey are released in two stages. The **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) and **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the **Labour Force, Australia** (cat. no. 6202.0) product set, which is released one week earlier.

The **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) is released monthly. **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the **Labour Force, Australia** (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

#### NEW LABOUR FORCE SURVEY SAMPLE DESIGN

The current Labour Force Survey sample is selected using information collected in the 2006 Census of Population and Housing. Following the release of 2011 Census based Estimated Resident Population (ERP), more up to date information is available for use in the selection of the Labour Force Survey sample. The ABS had previously advised in the July 2012 issue that the new Labour Force Survey sample would be phased in over four months from April 2013. The phase in strategy has been updated to commence from May 2013. An information paper (cat. no. 6269.0) will be released prior to the release of the May 2013 estimates in June 2013 with detailed information on the sample design.

#### ELECTRONIC COLLECTION OF LABOUR FORCE DATA

The ABS has been undertaking a trial of on-line electronic data collection of labour force data from households since December 2012. The trial is being conducted on one rotation group (i.e. one-eighth of the survey sample) and respondents were offered the option of completing the survey on-line instead of a face-to-face or telephone interview. The uptake in February was 20.9% of the rotation group (2.6% of the total labour force survey sample).

The trial will continue prior to a decision on rolling out progressively to the full Labour Force Survey sample.

#### ADDITIONAL INFORMATION - FEATURE ARTICLE ON JOBS

A feature article estimating the number of jobs in the economy and comparing it with the number of people employed has been included as a web article on Thursday 21 March attached to **Labour Force, Australia, February 2013** (cat. no. 6202.0). This article is also available from this catalogue number and issue.

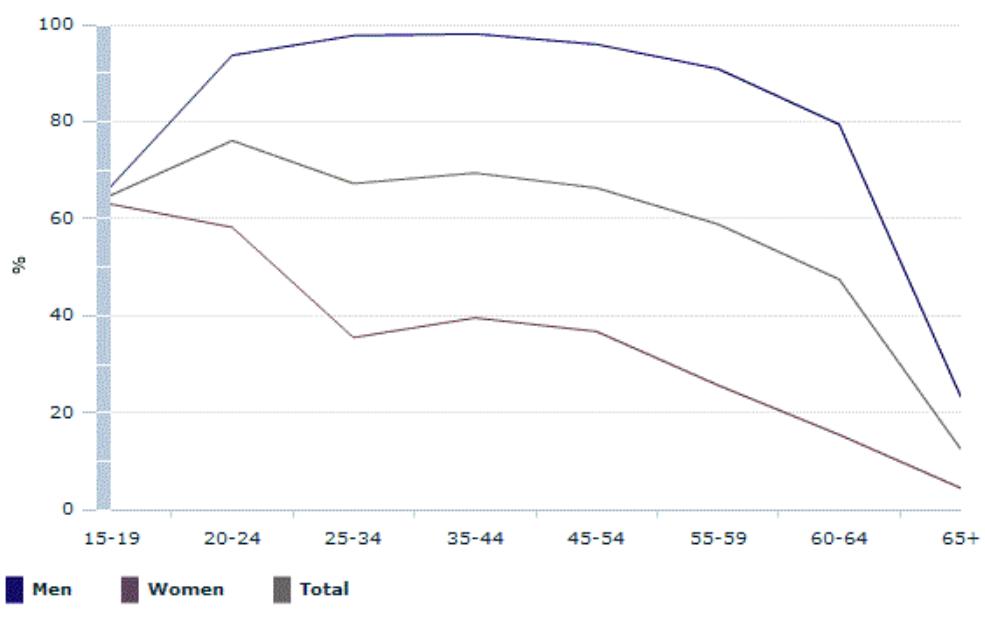
### Understanding Labour Force

## UNDERSTANDING THE AUSTRALIAN LABOUR FORCE USING ABS STATISTICS

In order to understand what is happening in Australian society, or our economy, it is helpful to understand people's patterns of work, unemployment and retirement. ABS statistics can help to build this picture. Fifty years ago, the majority of Australians who worked were men working full-time. Most worked well into their 60s, sometimes beyond, and if they were not working most were out looking for work until that age. The picture now is very different. Far more people work part-time, or in temporary or casual jobs. Retirement ages vary much more, with a greater proportion of men not participating in the labour force once they are older than 55. Nowadays, 45% of working Australians are women, compared with just 30% fifty years ago. These are profound changes that have helped shape 21st Century Australia. This note explains some of the key labour force figures the ABS produces that can be used to obtain a better picture of the labour market.

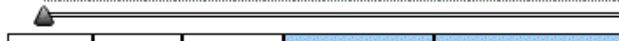
**Changes in the proportion of people actively participating in the labour market, 1966 to 2012**

Aug-66



### Controls

Aug-66 May-77 Feb-86 Nov-94 Aug-03 May-12 Nov-12



Play Stop Reset Full Screen Save Chart Image

Australian Bureau of Statistics

© Commonwealth of Australia 2013.

**Source(s):** Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001); Labour Force Historical Timeseries, Australia (cat. no. 6204.0.55.001)

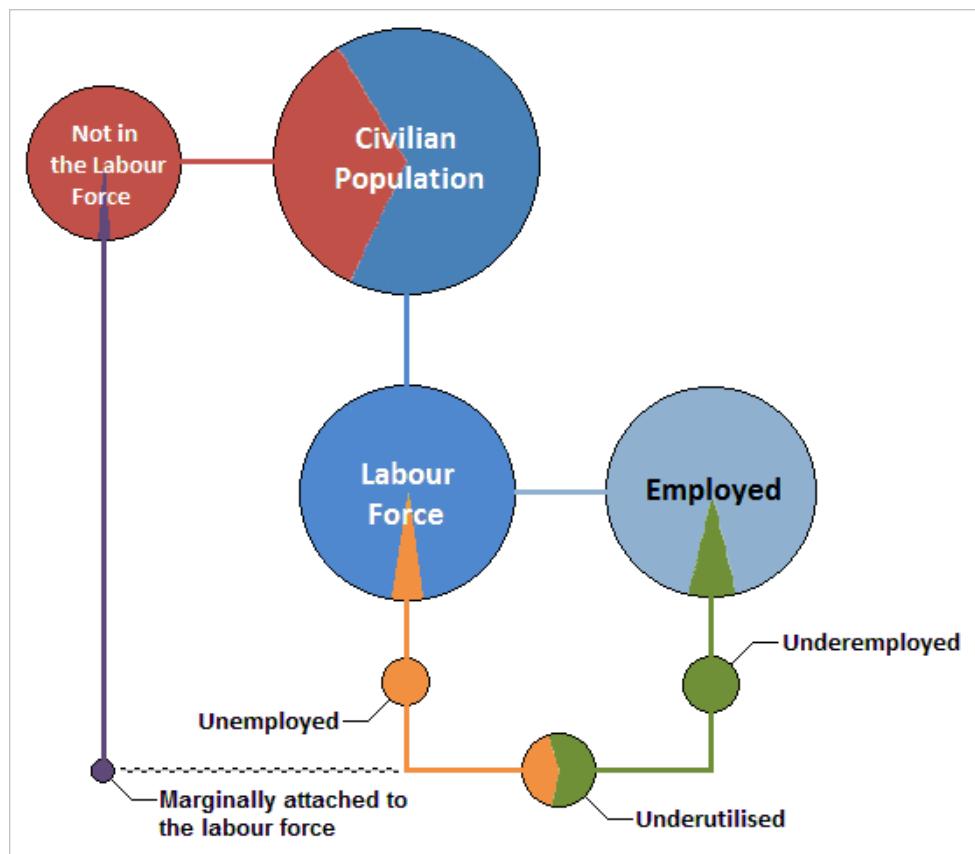
Every month, the ABS runs a Labour Force Survey across Australia covering almost 30,000 homes as well as a selection of hotels, hospitals, boarding schools, colleges, prisons and Indigenous communities. Apart from the Census, the Labour Force Survey is the largest household collection undertaken by the ABS. Data are collected for about 60,000 people and these people live in a broad range of areas and have diverse backgrounds - they are a very good representation of the Australian population. From this information, the ABS produces a wide variety of statistics that paint a picture of the labour market. Most statistics are produced using established international standards, to ensure they can be easily compared with the rest of the world. The ABS has also introduced new statistics in recent years that bring to light further aspects of the labour market. It can be informative to look at all of these indicators to get a grasp of

what is happening, particularly when the economy is changing quickly.

One thing to remember about the ABS labour force figures is that when a publication states that, for example, 11.4 million Australians are employed, the ABS has not actually checked with each and every one of these people. In common with most statistics produced, the ABS surveys a sample of people across Australia and then scales up the results – based on the latest population figures - to give a total for the whole country. Because the figures are from a sample, they are subject to possible error. The Labour Force Survey is a large one, so the error is minimised. The ABS provides information about the possible size of the error to help users understand how reliable the estimates are.

## CONTENTS

Employment  
Aggregate Monthly Hours Worked  
People who are not working: the Unemployed and others  
Labour Force and Participation Rate  
Unemployment Rate  
Underemployment Rate  
Labour Force Underutilisation Rate



The above diagram shows the breakdown of the civilian population into the different groups of labour force participation. Each pixel represents about 1000 people as at September 2011.

## EMPLOYMENT

According to established international standards, everyone who works for at least one hour or more for pay or profit is considered to be employed. This includes everyone from teenagers who work part-time after school, to a partially retired grandparent working for pay at the school canteen. While it is unreasonable to expect a family to survive on the income of an hour of work per week, one could also argue that all work, no matter how small, contributes to the economy. This definition of 'one hour or more' - which is an international standard - means that ABS' employment figures can be compared with the rest of the world. Now it is, of course, easy to argue that someone who works 2 or 3 hours per week is not

really "employed", but a definition is required, and any cut-off point is open to debate. Imagine if ABS defined being 'employed' as working 15 hours a week. Would it be reasonable to argue that someone who works 14.5 hours is unemployed, but 15 hours is not? It is also a mistake to assume that all persons who work low hours would prefer to work longer hours, and are therefore 'hidden' unemployment. Most people who work less than 15 hours a week are not seeking additional hours, although of course there are some who are. The issue of underemployment is further discussed below.

Rather than open up such discussions, the ABS prefers to use the international standard and the ABS also encourages people to consider other indicators to form a better picture of what is happening. Alongside the total employed figures, full-time and part-time estimates are provided to better inform on the different kinds of employment, and a detailed breakdown by the number of hours worked is also provided to allow for customised definitions of 'employment.'

Commentators often refer to the rise in employment as the number of new jobs created each month. This can be misleading, because the ABS doesn't actually measure the number of jobs. This might sound like semantics, but if a person in the Labour Force Survey who is employed gains a second part-time job at the same time as their main job, this would have no impact on the employment estimate - the Labour Force Survey does not count jobs, it counts people.

It is also important to bear in mind that if the relative growth in population is greater than the number of new people in employment, there might actually be an increase in the employment figure, but a lower percentage of people with jobs. It is often informative to look at the proportion of people in employment. This measure, called the **employment to population ratio**, is the number of employed people expressed as a percentage of the civilian population aged over 15. This removes the impact of population growth to give a better picture of labour market dynamics over time.

[Back to Top](#)

## AGGREGATE MONTHLY HOURS WORKED

Instead of counting how many people are working, another way of looking at how much Australians are working is to count the total number of hours worked by everyone. This is measured by a statistic produced by the ABS called **Aggregate monthly hours worked**, and it is measured in millions of hours. This can sometimes be more revealing of what is happening in the labour market, particularly in a weakening economy where a fall in hours worked can usually be seen before any fall in the number of people employed.

[Back to Top](#)

## PEOPLE WHO ARE NOT WORKING: THE UNEMPLOYED AND OTHERS

There are many reasons why Australians do not work. Some have retired and are not interested in going back to work. Some are staying home to look after children and plan on going back to work once the kids have grown older. Some are out canvassing for work every day while others have given up looking. The ABS separates all of these people into those who are unemployed and those who are not by asking two simple questions: **If you were given a job today, could you start straight away?** and **Have you taken active steps to look for work?** Only those who are ready to get back into work, and are taking active steps to find a job, are classed as unemployed.

Some people might like to work, but are not currently available to work - such as a parent who is busy looking after small children. Other people might want to work but have given up actively looking for work - such as a discouraged job seeker who only half-heartedly glances at the job ads in the newspaper but doesn't call or submit any applications. These people are not considered to be unemployed, but are regarded as being **marginally attached** to the labour force. They can be thought of as 'potentially unemployed' when, or if, their circumstances change, but are regarded as being on the fringe of labour force participation until then.

It is important to note that the ABS unemployment figures are not the same as the data that Centrelink collects on the number of people receiving unemployment benefits. The ABS bases its figures on asking people directly about their availability and steps to find work. In this way, policy decisions about, for example, the criteria for the receipt of unemployment benefits have no impact on the way that the unemployment figures are measured.

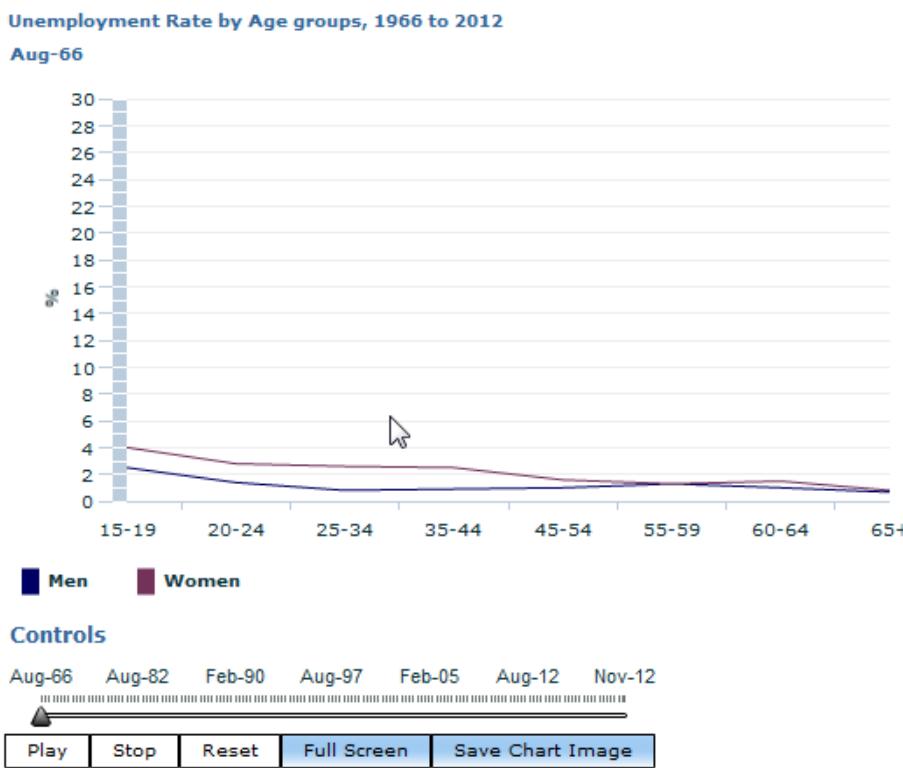
## LABOUR FORCE AND PARTICIPATION RATE

The size of the labour force is a measure of the total number of people in Australia who are willing and able to work. It includes everyone who is working or actively looking for work - that is, the number of employed and unemployed together as one group. The percentage of the total population who are in the labour force is known as the **participation rate**.

[Back to Top](#)

## UNEMPLOYMENT RATE

The **unemployment rate** is the percentage of people in the labour force who are unemployed. This is a popular measure around the world for tracking a country's economic health as it removes all the people who are not participating (such as those who are retired). Because the unemployment rate is expressed as a percentage, it is not directly influenced by population growth.



**Source(s):** Labour Force, Australia, Detailed - Electronic Delivery (cat. no. 6291.0.55.001); Labour Force Historical Timeseries, Australia (cat. no. 6204.0.55.001)

[Back to Top](#)

## UNDEREMPLOYMENT RATE

The **underemployment rate** is a useful companion to the unemployment rate. Instead of looking at the people who are unemployed, the underemployment rate captures those who are currently employed, but are willing and able to work more hours. It highlights the proportion of the the labour force who work part-time but would prefer to work full-time. This is sometimes referred to as the 'hidden' potential in the labour force.

The underemployment rate can be an important indicator of changes in the economic cycle. During an economic slow down, some people lose their jobs, become unemployed and contribute to a rising unemployment rate. But while this is happening, there might well be others who remain working but have their hours reduced, for example from full-time to part-time. As long as they want to work more hours, they

are classed as underemployed, and contribute to the underemployment rate.

[Back to Top](#)

## LABOUR FORCE UNDERUTILISATION RATE

The **labour force underutilisation rate** combines the unemployment rate and the underemployment rate into a single figure that represents the percentage of the labour force that is willing and able to do more work. It includes people who are not currently working and want to start, and those who are currently working but want to - and can - work more hours. It provides an alternative – and more complete – picture of labour market supply than the unemployment rate, as changes in the underutilisation rate capture both changes in unemployment and underemployment, indicating the spare capacity in the Australian labour force.

[Back to Top](#)

## FURTHER INFORMATION

For any queries regarding these measures or any other queries regarding the Labour Force Survey estimates, contact Labour Force on Canberra 02 6252 6525, or via email at [labourforce@abs.gov.au](mailto:labourforce@abs.gov.au).

[Back to Top](#)

## Article Archive

### AUSTRALIAN LABOUR FORCE STATISTICS ARTICLE ARCHIVE: January 2011 - CURRENT

This section provides an archive of articles and analysis published in *Labour Force, Australia* (cat. no. 6202.0), promoting the effective use of labour force statistics. Articles are sorted by publication date.

Articles on labour related topics are also regularly released in Australian Labour Market Statistics (cat. no. 6105.0) and Australian Social Trends (cat. no. 4102.0).

#### Labour Force Survey Archive

Forthcoming improvements to the content of the Labour Force and Labour Supplementary Surveys	January 2013
What's New in Labour Force	January 2013
Rebenchmarking of Labour Force Series	November 2012
Upcoming changes to the Labour Force Survey	July 2012
Labour Household Surveys content review and the Labour Force Survey	June 2012
Employment and mining in Queensland, New South Wales and Western Australia	May 2012
ABS Response to recent concerns expressed about employment estimates	April 2012
Population Benchmarks and Labour Force Survey	April 2012
Annual Seasonal Reanalysis	March 2012
Exploring Labour Force Data on joblessness	February 2012
Employment level estimates versus employment to population explained	January 2012
Understanding the Australian Labour Force using ABS statistics	November 2011
Historical Revisions	February 2011
Impact of the floods on the Labour Force Survey	January 2011

## Estimating Jobs in the Australian Labour Market

### ESTIMATING JOBS IN THE AUSTRALIAN LABOUR MARKET

## INTRODUCTION

This article presents estimates of the number of jobs over time in the Australian labour market. These estimates complement other important indicators of the state of the labour market and the economy provided regularly by the ABS, for example, estimates of employment and job vacancies. Increases or decreases in the number of jobs is generally seen as a guide to the performance and capacity of the labour market.

A supply side analysis of filled jobs is provided, facilitating comparison with employment estimates. The number of filled jobs is an estimate of jobs held by employed people from the ABS monthly Labour Force Survey (LFS).

The number of filled jobs is supplemented with unfilled jobs data from the quarterly Job Vacancies Survey (JVS) to form a measure of total jobs (filled and unfilled). LFS data up to February 2013, and the latest available JVS data (November 2012) are presented. Information regarding the methodology used to derive these estimates is available in the Appendix.

## OVERVIEW

The LFS provides regular estimates of the number of employed people at a point in time. However, these estimates are often misrepresented as the number of jobs. The LFS estimates do not provide a measure of the number of jobs, they provide a measure of the number of people who are employed (the number of people who have a job). Similarly, the LFS measures the net increase or decrease in the number of people who have a job (not the number of jobs 'created' or 'lost').

A person holding multiple jobs with different employers is counted in the LFS as one person employed, even though they have more than one job. This has been previously discussed in the article Employment or Jobs - What does the Labour Force Survey measure (published in the October 2011 issue of Australian Labour Market Statistics (cat. no. 6105.0)).

The distinction between jobs and employment is also important when considering full-time/part-time status. As full-time/part-time status relates to a person's employment (based on the total hours they work in all of their jobs), the number of full-time employed people (and changes in that number) does not equate to the number of full-time jobs in the labour market.

ABS household surveys provide labour supply estimates (for example, employment in the LFS) whereas business surveys are better suited to providing estimates on labour demand. Therefore filled jobs estimates would be better suited to business surveys, because they would be based on the number of jobs involving paid employment. However, there is no frequent (sub-annual) ABS economy-wide survey which collects jobs data from businesses. Nonetheless it is possible to use existing data from the LFS to derive estimates of the number of jobs held by employed people. This was foreshadowed in Information paper: Outcomes of the Labour Household Surveys Content Review (cat. no. 6107.0).

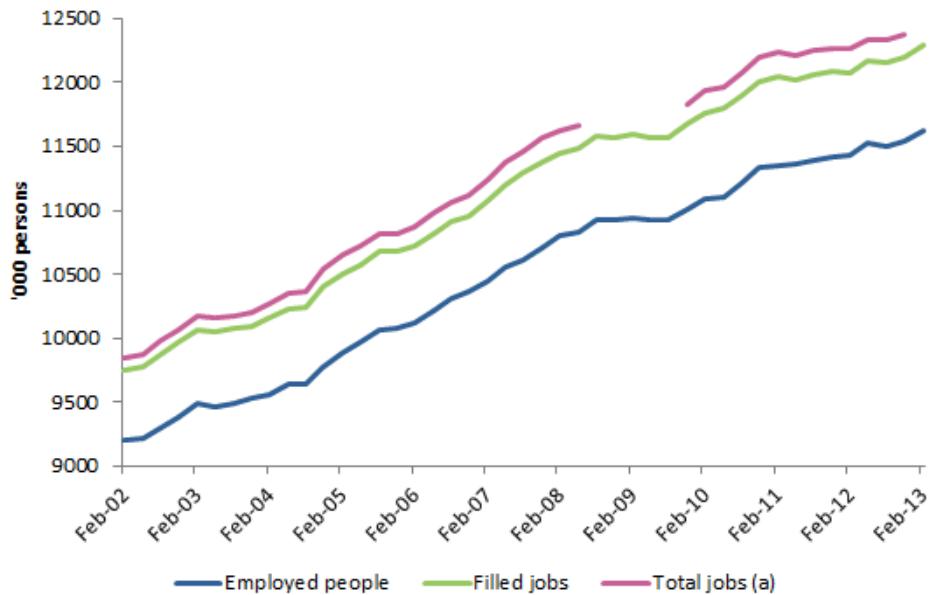
## TRENDS IN THE NUMBER OF JOBS

In February 2013, there were 11,628,300 employed people in Australia (seasonally adjusted). Of these, 610,500 were multiple job holders, resulting in an estimated 12,287,200 (filled) jobs (refer to Appendix for details). This highlights that in February 2013, there were 658,900 more filled jobs than there were employed people.

In November 2012, the estimated number of total (filled and unfilled) jobs in the labour market was 12,371,200, or 826,500 more than the number of employed people.

The number of filled and total jobs follows a similar long term trend to that of the number of employed people, but at a higher level because of multiple job holding (Figure 1). However, the difference has increased over recent years; in February 2002, the difference between filled jobs and employment was 553,100, while in February 2013 this difference was 659,700.

**Figure 1: Employment and jobs (seasonally adjusted, quarterly)**

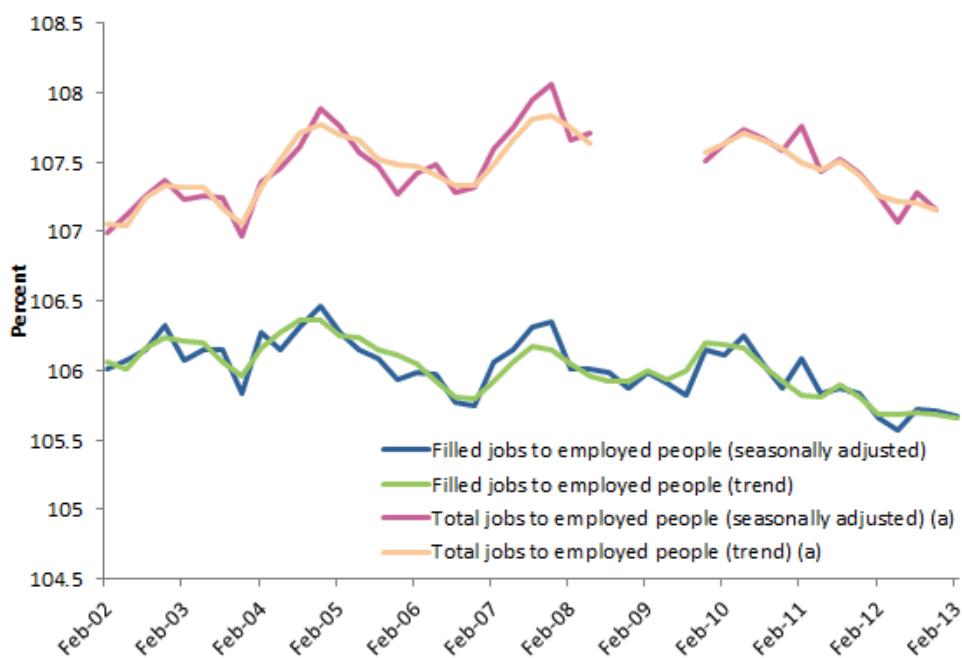


(a) JVS was suspended between August 2008 and August 2009, therefore no total jobs data are available for this period.

Source: *Labour Force Survey, Job Vacancies Survey and Survey of Employment Arrangements, Retirement and Superannuation* (see appendix for details of the methodology)

Presenting a 'jobs to employment' ratio is a more illustrative way of examining the relationship between jobs and employment, as it removes the underlying impact of employment growth. Figure 2 shows the proportion of jobs relative to employment. For example, a ratio of 107 percent indicates that there are 107 jobs for every 100 employed people.

**Figure 2: Proportion of jobs to employment (quarterly)**



(a) JVS was suspended between August 2008 and August 2009, therefore no total jobs data are available for this period.

Source: *Labour Force Survey, Job Vacancies Survey and Survey of Employment Arrangements, Retirement and Superannuation* (see appendix for details of the methodology)

These ratios show an increase in total jobs around 2004, relating to both job vacancies as well as filled jobs. The number of filled jobs per employee has followed a long-term cycle, but has trended downward

slightly, and has recently fallen to its lowest point in a decade. The ratios of both filled and total jobs to employment have been trending down since early 2010.

## **FULL-TIME AND PART-TIME JOBS**

Full-time/part-time status relates to a person's employment (based on the total hours they work in all of their jobs). Therefore it is possible for a worker to be categorised as employed full-time, but hold multiple part-time jobs. In analysing full-time/part-time status, the number of people employed full-time and part-time are often misrepresented as the number of full-time and part-time jobs, which is not the case.

The JVS does not identify specific characteristics of each vacant job; therefore vacancies are not identified by whether they are for full-time or part-time positions. As a result, separate measures of total full-time jobs and total part-time jobs cannot be obtained.

The number of people employed full-time exceeds the number of full-time filled jobs because many people who have multiple part-time jobs work a total of more than 35 hours per week, and are therefore classified as employed full-time in the LFS. Conversely the number of part-time filled jobs exceeds the number of people employed part-time. More information is available in the Appendix.

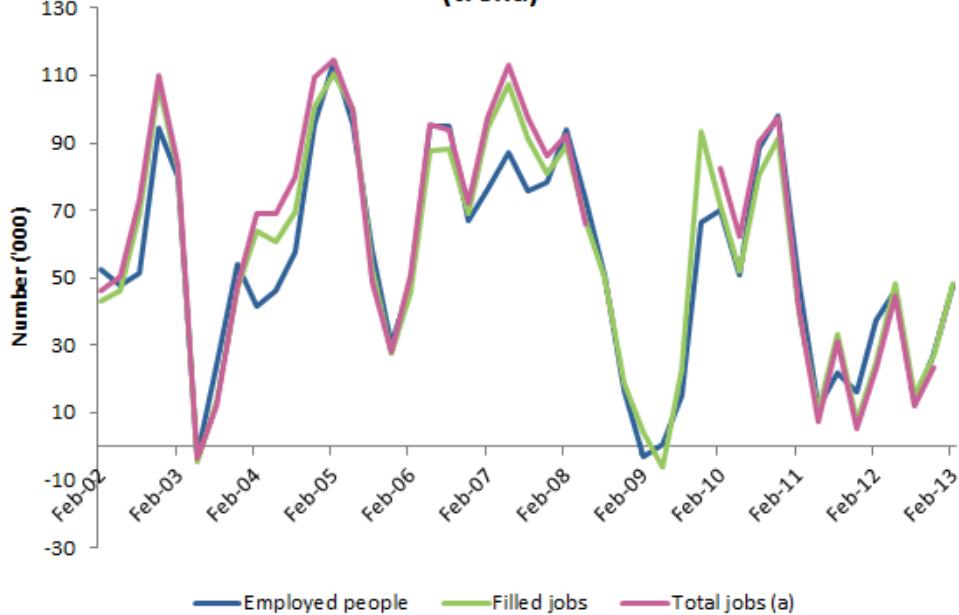
In February 2013, there were 8,117,400 full-time employed people (seasonally adjusted), compared with 7,943,100 full-time filled jobs; that is 174,400 fewer full-time jobs. There were 3,510,800 people employed part-time, and 4,261,300 part-time jobs; that is 750,500 more part-time jobs. The ratio of part-time filled jobs to all filled jobs is consistently higher than the ratio of people employed part-time to all people employed. In February 2013, 35% of filled jobs were part-time compared to the 30% of people who were employed part-time. This provides an alternative perspective on the prevalence of part-time work.

## **CHANGE IN NUMBER OF JOBS**

When looking at changes in the number of jobs over time, it is important to recognise that a net increase in the number of jobs does not equate to the number of jobs 'created', and a net decrease in the number of jobs does not equate to the number of jobs 'lost'. For example, if a business closes down and twenty people lose their job while a new business starts and hires thirty people, then there is a net increase of ten jobs. While the net figure is important it is also important to recognise the underlying flow of jobs, i.e. to understand that 'twenty jobs were lost' and 'thirty jobs were created'.

As shown in Figure 1, the number of jobs follows a similar long term trend to employment levels. Over time, there is volatility in the change of both employment and jobs, even when looking at seasonally adjusted data. Using trend data, long-term cycles are more clearly identifiable, with strong increases in both employment and jobs from 2004 to 2007 evident (Figure 3). The quarterly increases in employment in both 2004 and 2007 were lower than the increases for both filled and total jobs. This indicates stronger growth in multiple job holding and job vacancies during these periods relative to employment.

**Figure 3: Quarterly change in employment and jobs (trend)**



(a) JVS was suspended between August 2008 and August 2009, therefore no total jobs data are available for this period.

Source: *Labour Force Survey, Job Vacancies Survey and Survey of Employment Arrangements, Retirement and Superannuation (see appendix for details of the methodology)*

Over shorter periods, seasonally adjusted data facilitates the interpretation of period-to-period movements. With seasonally adjusted data, there are noteworthy deviations in the month-to-month net changes between employment and filled jobs, as seen in Figure 4.

**Figure 4: Monthly change in employment and filled jobs (seasonally adjusted)**



Source: *Labour Force Survey and Survey of Employment Arrangements, Retirement and Superannuation (see appendix for details of the methodology)*

Generally, the monthly changes in employment and filled jobs are similar. However, there are some periods where employment and filled jobs have quite different movements. Examples of this divergence include:

- November 2011, where employment rose by 5,100, but filled jobs fell by 5,200 from the previous

month;

- February 2011, where employment fell by 8,400, but filled jobs rose by 27,000 from the previous month;
- the two month period to October 2009, where filled jobs rose by 75,900 more than the rise in employment; and
- December 2007, where employment rose by 22,900, but the number of filled jobs fell by 10,600.

## CONCLUSION

Measures of jobs provide an alternative way of examining the labour market. This article explained the difference between the concepts of employment and jobs. In addition, the article demonstrated that while filled jobs and total jobs follow a similar long-term trend to employment, the levels are not the same, and they do not necessarily move in the same way from period to period. This distinction between employment and jobs is particularly important when analysing full-time or part-time status, since full-time and part-time employment relate to the number of hours worked over all jobs held, rather than the number of full-time or part-time jobs.

The ABS welcomes comments on the usefulness of the analysis in this article, and on the methodology used to derive the estimates. For further information on this article, or to provide feedback, please contact Pourus Bharucha on (02) 6252 6218 or email <[pourus.bharucha@abs.gov.au](mailto:pourus.bharucha@abs.gov.au)>.

Subject to any feedback received, the ABS is considering producing these estimates annually.

## APPENDIX: METHODOLOGY

The jobs estimates provided in this article are compiled using data from the monthly LFS, the quarterly JVS and the 2007 Survey of Employment Arrangements, Retirement and Superannuation (SEARS). While estimates of filled jobs would ideally be sourced from a survey of businesses (with access to payroll information) rather than a survey of households, there is no frequent (sub-annual) ABS economy-wide survey which captures jobs data from businesses.

Estimates of the number of filled jobs were produced using data collected in the LFS. The LFS identifies whether an employed person has more than one job, but not the number of jobs they hold. The 2007 SEARS provides estimates of the proportion of multiple job holders with two, three or four jobs, and these proportions were applied to the LFS estimate of the number of multiple job holders. In addition, by using LFS estimates of the hours actually worked in a multiple job holder's main job in the reference week, the number of full-time and part-time employed were converted into the number of full-time and part-time jobs held. Since usual hours for a multiple job holder's main job are not collected, the full-time/part-time status of a multiple job holder's main job is estimated based on actual hours only. A negligible number of employed people have multiple full-time jobs.

The time series for multiple job holders who are full-time or part-time in their main job, or who are full-time or part-time employed, have different seasonal patterns, and are therefore independently seasonally adjusted. This means that the components will not necessarily add to the number of multiple job holders. However this does not affect the analysis.

The 2007 SEARS showed that of all multiple job holders, 93% had two jobs, 7% had three jobs, and less than 1% had 4 or more jobs. These proportions were applied to data on the number of multiple job holders from the LFS to generate the total number of filled jobs in the labour market back to mid 2001, as multiple job holder data are available on a consistent basis back to this point in time. Multiple job holding data are also available from the 2000 Survey of Employment Arrangements and Superannuation (SEAS). The results of the 2000 and 2007 surveys indicate that the extent of multiple job holding (the proportions of multiple job holders with two, three or four jobs) was not substantially different between these periods.

From mid 2014, the ABS plans to expand the data collected on multiple job holders in the LFS to include the number of jobs held by employed people. See Information paper: Outcomes of the Labour Household Surveys Content Review (cat. no. 6107.0) for more information.

The total number of jobs equals these LFS filled jobs estimates (as described above) plus the number of unfilled jobs estimated from the quarterly JVS. Job vacancies estimates from the the JVS relate to vacant

jobs for which recruitment action has been taken and which are available for immediate filling on the reference date (not merely jobs which could be considered 'unoccupied'). More information is available under the Explanatory Notes - Glossary section of Job Vacancies, Australia (cat. no. 6354.0).

The scope of these jobs estimates is based on the scope of the surveys they are generated from. For example, filled jobs, sourced primarily from the LFS, excludes jobs occupied by people aged under 15 years, as well as jobs occupied by military personnel or non-residents of Australia. The JVS excludes those businesses primarily engaged in agriculture, forestry and fishing; private households employing staff; and foreign embassies, consulates, etc.

## About this Release

A range of Excel spreadsheets and SuperTABLE datacubes. The monthly spreadsheets contain broad level data covering all the major items of the Labour Force Survey in time series format, including seasonally adjusted and trend estimates. The monthly datacubes contain more detailed and cross classified original data than the spreadsheets.

## Explanatory Notes

### Explanatory Notes

Data from the monthly Labour Force Survey are released in two stages. The **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) and **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) are part of the second release, and include detailed data not contained in the **Labour Force, Australia** (cat. no. 6202.0) product set, which is released one week earlier.

The **Labour Force, Australia, Detailed - Electronic Delivery** (cat. no. 6291.0.55.001) is released monthly. **Labour Force, Australia, Detailed, Quarterly** (cat. no. 6291.0.55.003) includes data only collected in February, May, August and November (including industry and occupation).

Since these products are based on the same data as the **Labour Force, Australia** (cat. no. 6202.0) publication, the 6202.0 Labour Force, Australia Explanatory Notes are relevant to both releases.

## Quality Declaration - Summary

### QUALITY DECLARATION - SUMMARY

#### INSTITUTIONAL ENVIRONMENT

Labour Force statistics are compiled from the Labour Force Survey which is conducted each month throughout Australia as part of the Australian Bureau of Statistics (ABS) household survey program. For information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.

#### RELEVANCE

The Labour Force Survey provides monthly information about the labour market activity of Australia's resident civilian population aged 15 years and over. The Labour Force Survey is designed to primarily provide estimates of employment and unemployment for the whole of Australia and, secondarily, for each state and territory.

## **TIMELINESS**

The Labour Force Survey enumeration begins on the Sunday between the 5th and 11th of the month, except for the Christmas and New Year holiday period. In December enumerations starts between the 3rd and 9th (4 weeks after November enumeration begins). In January enumeration starts between the 7th and 13th (5 weeks after December enumeration begins).

Key estimates from the Labour Force Survey are published in two stages. The first, *Labour Force, Australia* (cat. no. 6202.0), is released 32 days after the commencement of enumeration for the month, with the exception of estimates for December which are published 39 days after the commencement of enumeration.

The second stage includes detailed data that were not part of the first stage and are published in *Labour Force, Australia, Detailed - Electronic Delivery* (cat. no. 6291.0.55.001) and *Labour Force, Australia, Detailed, Quarterly* (cat. no. 6291.0.55.003). The second stage is released 7 days after the first stage.

## **ACCURACY**

The Labour Force Survey is based on a sample of private dwellings (approximately 29,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.33% of the Australian civilian population aged 15 years or over. The Labour Force Survey is designed primarily to provide estimates of key labour force statistics for the whole of Australia and, secondarily, for each state and territory.

Two types of error are possible in an estimate based on a sample survey: non-sampling error and sampling error.

Non-sampling error arises from inaccuracies in collecting, recording and processing the data. Every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. Non-sampling error also arises because information cannot be obtained from all persons selected in the survey. The Labour Force Survey receives a high level of cooperation, with an average response rate for the last year being 97%.

Sampling error occurs because a sample, rather than the entire population, is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors.

Standard errors of key estimates and movements since the previous month are available in *Labour Force, Australia* (cat. no. 6202.0). The standard error of other estimates and movements may be calculated by using the spreadsheet contained in *Labour Force Survey Standard Errors, Data Cube* (cat. no. 6298.0.55.001).

## **COHERENCE**

The ABS has been conducting the Labour Force Survey each month since February 1978. While seeking to provide a high degree of consistency and comparability over time by minimising changes to the survey, sound survey practice requires careful and continuing maintenance and development to maintain the integrity of the data and the efficiency of the collection.

The changes which have been made to the Labour Force Survey have included changes in sampling methods, estimation methods, concepts, data item definitions, classifications, and time series analysis techniques. In introducing these changes the ABS has generally revised previous estimates to ensure consistency and coherence with current estimates. For a full list of changes made to the Labour Force Survey see Chapter 20 in *Labour Statistics: Concepts, Sources and Methods* (cat. no. 6102.0.55.001).

## **INTERPRETABILITY**

The key estimates from the Labour Force Survey are available as original, seasonally adjusted and trend series. Seasonal adjustment is a means of removing the effects of normal seasonal variation from the series so other influences on the series can be more clearly recognised. Seasonal adjustment does not aim to remove the irregular influences which may be present and therefore month-to-month movements may not be reliable indicators of underlying behaviour. To assist in interpreting the underlying behaviour, the ABS produces the trend series by smoothing the seasonally adjusted series to reduce the impact of the irregular component. For further information, see *A Guide to Interpreting Time Series - Monitoring Trends* (cat. no. 1349.0).

Further information on the terminology and other technical aspects associated with statistics from the Labour Force Survey can be found in the publication *Labour Force, Australia* (cat. no. 6202.0), which contains detailed Explanatory Notes, Standard Error information and a Glossary.

## ACCESSIBILITY

Please see the Related Information tab for the list of products that are available from this collection.

## Data Cubes (I-Note) - Data Cubes

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions.

The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article *Impact of the floods on the Labour Force Survey* in January 2011 for more information.

## Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions.

The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article *Impact of the floods on the Labour Force Survey* in January 2011 for more information.

## Data Cubes (I-Note) - Data Cubes

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions.

The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article *Impact of the floods on the Labour Force Survey* in January 2011 for more information.

## Data Cubes (I-Note) - Data Cubes

Due to the flooding in Queensland in January 2011, the relative standard errors for January 2011 will vary across regions and will be higher than normal in some regions.

The RSEs for the Darling Downs-South West and Ipswich City Statistical Regions are expected to be approximately 50% higher, while the RSEs for the Brisbane City Inner Ring Statistical Region will increase by approximately 25%. The Brisbane City Outer Ring, West Moreton and Mackay-Fitzroy-Central West Statistical Regions will have RSEs approximately 10% higher. All other regions have minimal differences. However from February 2011, the data returns to normal. Refer to the article *Impact of the floods on the Labour Force Survey* in January 2011 for more information.

## Standard Errors

Estimates from the Labour Force Survey (LFS) are based on information collected from people in a sample of dwellings, rather than the entire population. Hence the estimates produced may differ from those that would have been produced if the entire population had been included in the survey. The most common measure of the likely difference (or 'sampling error') is the **standard error** (SE).

The ABS considers that estimates with a relative standard error of 25% or more may be subject to sampling variability too high for most practical purposes.

To determine if an item has a relative standard error of 25% or more, in SuperTABLE, right click in the centre of the table, select annotate cells - standard annotations, and select 'Annotate RSE cut-off values'.

To indicate those cells in spreadsheets with a relative standard error of 25% or more, annotations have been applied prior to dissemination.

In addition, the tables below have been supplied to show estimates at which the relative standard error is 25%. Estimates of the size indicated in the tables, or smaller, are considered to be subject to sampling variability too high for most practical purposes.

Due to the January 2011 flooding in Queensland the relative standard errors for January will be higher than normal in some regions, therefore for Queensland the estimates at which the relative standard error is 25% will be higher than they appear in the tables below. However from February, the data returns to normal.

Additional information on how standard errors for LFS estimates are produced is available in [Labour Force Survey Standard Errors, Data Cube](#) (cat. no. 6298.0.55.001).

State	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
<b>Employed</b>									
Feb 78 to Sep 82	4.5	4.5	3.5	2.5	2.5	1.5	2.0	2.0	4.5
Oct 82 to Aug 87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep 87 to Aug 92	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Sep 92 to Aug 97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep 97 to Mar 01	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Apr 01 to Oct 07	4.9	4.1	3.7	2.0	2.3	1.1	1.4	1.1	4.9
Nov-07	5.0	4.1	3.8	2.0	2.4	1.2	1.3	1.1	5.0
Dec-07	5.0	4.2	3.9	2.0	2.4	1.2	1.2	1.1	5.0
Jan-08	5.1	4.3	3.9	2.1	2.5	1.2	1.2	1.2	5.1
Feb-08	5.2	4.4	4.0	2.1	2.6	1.2	1.1	1.2	5.1
Mar-08	5.4	4.4	4.1	2.1	2.9	1.2	1.0	1.2	5.2
Apr-08	5.5	4.6	4.5	2.2	3.0	1.2	0.9	1.3	5.3
May-08	5.5	4.7	4.5	2.3	3.1	1.3	0.9	1.3	5.4
Jun-08	5.6	4.8	4.6	2.3	3.2	1.3	0.9	1.3	5.4
Jul 08 to Aug 09	7.0	6.0	5.7	2.9	4.0	1.6	1.0	1.6	7.7
Sep-09	6.6	5.7	5.4	2.7	3.7	1.5	1.0	1.5	7.2
Oct-09	6.2	5.4	5.1	2.6	3.5	1.4	0.9	1.4	6.7
Nov-09	5.9	5.1	4.9	2.4	3.3	1.3	0.9	1.4	6.4
Dec-09 onwards	5.6	4.8	4.6	2.3	3.2	1.3	0.9	1.3	6.0
<b>Unemployed</b>									
Feb 78 to Sep 82	4.5	4.5	3.5	2.5	2.5	1.5	2.0	2.0	4.5
Oct 82 to Aug 87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep 87 to Aug 92	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Sep 92 to Aug 97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep 97 to Mar 01	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Apr 01 to Oct 07	5.7	4.9	4.2	2.7	3.0	1.7	2.4	1.5	4.7
Nov-07	5.8	5.0	4.3	2.8	3.2	1.7	2.2	1.6	4.8
Dec-07	5.9	5.1	4.4	2.8	3.3	1.7	1.9	1.6	4.8
Jan-08	6.0	5.3	4.5	2.9	3.4	1.7	1.8	1.7	4.9
Feb-08	6.2	5.4	4.7	3.0	3.6	1.8	1.6	1.7	4.9
Mar-08	6.4	5.5	4.8	3.0	3.9	1.8	1.5	1.8	5.0
Apr-08	6.5	5.8	5.2	3.2	4.1	1.8	1.4	1.9	5.1
May-08	6.6	5.9	5.3	3.3	4.3	1.9	1.3	2.0	5.2
Jun-08	6.8	6.1	5.5	3.3	4.5	1.9	1.3	2.1	5.2
Jul 08 to Aug 09	8.9	8.0	7.3	4.4	6.0	2.5	1.6	2.7	7.5
Sep-09	8.3	7.4	6.7	4.1	5.5	2.3	1.5	2.5	7.0
Oct-09	7.7	6.9	6.3	3.8	5.2	2.1	1.4	2.3	6.5
Nov-09	7.2	6.5	5.9	3.6	4.8	2.0	1.3	2.2	6.1
Dec-09 onwards	6.8	6.1	5.5	3.3	4.5	1.9	1.3	2.1	5.8
<b>ILF</b>									
Feb 78 to Sep 82	4.5	4.5	3.5	2.5	2.5	1.5	2.0	2.0	4.5
Oct 82 to Aug 87	4.0	4.0	3.0	1.8	2.0	1.0	1.8	1.3	3.5
Sep 87 to Aug 92	4.5	4.5	3.0	2.0	2.5	1.3	1.8	1.5	4.0
Sep 92 to Aug 97	5.3	4.6	3.5	2.4	2.9	1.3	1.3	1.0	4.0
Sep 97 to Mar 01	5.9	4.5	4.1	2.4	2.8	1.1	1.0	1.1	4.4
Apr 01 to Oct 07	5.9	4.8	4.4	2.5	2.9	1.3	1.8	1.3	5.3
Nov-07	6.0	4.9	4.5	2.5	3.0	1.4	1.7	1.4	5.3
Dec-07	6.1	5.0	4.5	2.6	3.0	1.4	1.6	1.4	5.4
Jan-08	6.2	5.1	4.6	2.6	3.1	1.4	1.5	1.4	5.4
Feb-08	6.2	5.2	4.7	2.7	3.2	1.4	1.4	1.5	5.5
Mar-08	6.6	5.4	4.8	2.7	3.6	1.4	1.2	1.5	5.6
Apr-08	6.7	5.6	5.3	2.9	3.7	1.5	1.1	1.6	5.7
May-08	6.8	5.7	5.5	2.9	3.9	1.5	1.1	1.6	5.8
Jun-08	6.9	5.9	5.6	3.0	4.0	1.5	1.0	1.7	5.8
Jul 08 to Aug 09	8.7	7.4	7.1	3.7	5.1	1.9	1.3	2.0	8.3
Sep-09	8.1	7.0	6.6	3.5	4.8	1.7	1.2	1.9	7.8
Oct-09	7.7	6.6	6.2	3.3	4.5	1.7	1.1	1.8	7.3
Nov-09	7.2	6.2	5.9	3.1	4.2	1.6	1.1	1.7	6.9
Dec-09 onwards	6.9	5.9	5.6	3.0	4.0	1.5	1.0	1.7	6.5

Capital City/Balance of State	Sep 92 to Aug 97	Sep 97 to Mar 01	Apr 01 to Oct 07	Nov 07 to Jun 08	Jul 08 to Nov 09	From Dec 09
Sydney Major Statistical Region	5.3	5.7	5.0	5.8	7.3	5.8
Balance of New South Wales Major Statistical Region	5.3	5.7	5.0	5.7	7.2	5.7
Melbourne Major Statistical Region	4.6	4.6	4.2	5.0	6.3	5
Balance of Victoria Major Statistical Region	4.6	4.3	4.1	4.9	6.1	4.9
Brisbane Major Statistical Region	3.5	3.7	3.5	4.3	5.4	4.3
Balance of Queensland Major Statistical Region	3.6	4.3	3.7	4.7	5.8	4.7
Adelaide Major Statistical Region	2.4	2.4	2.1	2.5	3.1	2.5
Balance of South Australia Major Statistical Region	2.5	2.2	2.0	2.4	2.9	2.4
Perth Major Statistical Region	2.9	2.6	2.5	3.4	4.2	3.4
Balance of Western Australia Major Statistical Region	2.9	2.8	2.3	3.2	4.0	3.2

Regions	Sep 97 to Mar 01	Apr 01 to Oct 07	Nov 07 to Jun 08	Jul 08 to Nov 09	From Dec 09
Sydney Major Statistical Region	5.7	5.0	5.8	7.3	5.8
Inner Sydney and Inner Western Sydney Statistical Regions	4.4	6.8	8.0	10.5	8.0
Inner Sydney Statistical Region	3.8	7.2	8.5	11.1	8.5
Inner Western Sydney Statistical Region		6.3	7.4	9.8	7.4
Eastern Suburbs Statistical Region	2.4	8.1	9.6	12.5	9.6
St George-Sutherland Statistical Region	1.7	6.2	7.3	9.6	7.3
Canterbury-Bankstown Statistical Region	2.9	6.1	7.3	9.5	7.3
Fairfield-Liverpool and Outer South Western Sydney Statistical Regions	4.3	6.3	7.4	9.7	7.4
Fairfield-Liverpool Statistical Region	4.0	6.3	7.5	9.8	7.5
Outer South Western Sydney Statistical Region		6.2	7.3	9.6	7.3
Central Western Sydney Statistical Region	2.2	6.7	7.9	10.4	7.9
North Western Sydney Statistical Region (1)	3.1	6.1	7.3	9.5	7.3
Outer Western Sydney Statistical Region	3.1				
Blacktown-Baulkham Hills Statistical Region					
Lower Northern Sydney Statistical Region	3.2	6.6	7.8	10.3	7.8
Central Northern Sydney Statistical Region (2)	3.0	6.1	7.2	9.5	7.2
Hornsby-Ku-ring-gai Statistical Region					
Northern Beaches Statistical Region	2.1	6.6	7.8	10.2	7.8
Gosford-Wyong Statistical Region	2.3	6.2	7.4	9.7	7.4

(1) Formerly Outer Western Sydney Statistical Region & Blacktown

(2) Formerly Hornsby - Ku-ring-gai Statistical Region & Baulkham Hills

Balance of New South Wales Major Statistical Region	5.7	5.0	5.7	7.2	5.7
Hunter Statistical Region	4.0	6.0	7.1	9.3	7.1
Newcastle Statistical Region Sector	3.6	5.9	7.1	9.3	7.1
Hunter excluding Newcastle		6.0	7.1	9.3	7.1
Illawarra and South Eastern Statistical Regions	4.6	6.5	7.7	10.1	7.7
Illawarra Statistical Region	3.8	6.8	8.1	10.6	8.1
Wollongong Statistical Region Sector	2.4	6.4	7.6	10.0	7.6
Illawarra excluding Wollongong		7.6	9.0	11.7	9.0
South Eastern Statistical Region		6.0	7.2	9.4	7.2
Richmond-Tweed and Mid-North Coast Statistical Regions	5.5	6.4	7.6	10.0	7.6
Murray-Murrumbidgee Statistical Region	5.7	6.4	7.5	9.9	7.5
Northern, Far West-North Western and Central West Statistical Regions	5.1	6.3	7.5	9.8	7.5
Northern, North Western and Central West Statistical Regions		6.4	7.6	9.9	7.6
Far West Statistical Region		5.4	6.4	8.4	6.4

Melbourne Major Statistical Region	4.6	4.2	5.0	6.3	5.0
Outer Western Melbourne Statistical Region	3.0	4.8	5.9	7.8	5.9
North Western Melbourne Statistical Region	3.5	5.2	6.5	8.5	6.5
Inner Melbourne Statistical Region	3.2	6.0	7.4	9.7	7.4
North Eastern Melbourne Statistical Region	2.8	5.1	6.4	8.3	6.4
Inner Eastern Melbourne Statistical Region	3.0	4.9	6.1	8.0	6.1
Southern Melbourne Statistical Region	2.5	5.0	6.3	8.2	6.3
Outer Eastern Melbourne Statistical Region	3.0	5.2	6.5	8.5	6.5
South Eastern Melbourne Statistical Region	3.6	4.9	6.1	8.0	6.1
Mornington Peninsula Statistical Region	2.7	5.0	6.2	8.1	6.2
Balance of Victoria Major Statistical Region	4.3	4.1	4.9	6.1	4.9
Bellarive-Western District Statistical Region	4.1	5.0	6.3	8.2	6.3
Central Highlands-Wimmera Statistical Region	4.4	5.5	6.8	8.9	6.8
Loddon-Mallee Statistical Region	4.7	5.2	6.5	8.6	6.5
Goulburn-Ovens-Murray Statistical Region	4.5	5.8	7.2	9.4	7.2
All Gippsland Statistical Region	4.0	5.6	7.0	9.1	7.0
Brisbane Major Statistical Region	3.7	3.5	4.3	5.4	4.3
Brisbane City Inner Ring Statistical Region	3.8	4.4	5.8	7.6	5.8
Brisbane City Outer Ring Statistical Region	3.4	4.2	5.6	7.3	5.6
South and East BSD Balance Statistical Region	3.3	4.5	5.6	7.3	5.9
North BSD Balance Statistical Region	2.6	4.0	5.3	7.0	5.3
Ipswich City Statistical Region			5.3	7.0	5.3
Balance of Queensland Major Statistical Region	4.3	3.7	4.7	5.8	4.7
Gold Coast Statistical Region		4.7	6.2	8.1	134
Gold Coast North Statistical Region Sector			7.4	7.4	7.4
Gold Coast South Statistical Region Sector			5.9	7.7	5.9
West Moreton Statistical Region	3.2	4.5	5.9	7.7	5.9
Wide Bay-Burnett Statistical Region	3.7	4.7	6.2	8.2	6.2
Darling Downs-South West Statistical Region	3.0	4.8	6.3	8.2	6.3
Mackay-Fitzroy-Central West Statistical Region	3.7	4.3	5.7	7.5	5.7
Northern-North West Statistical Region	3.4	4.8	6.4	8.4	6.4
Far North Statistical Region	4.1	5.1	6.7	8.8	6.7
Sunshine Coast Statistical Region			5.9	7.7	5.9
Adelaide Major Statistical Region	2.4	2.1	2.5	3.1	2.5
Northern Adelaide Statistical Region	1.9	2.5	3.0	3.9	3.0
Western Adelaide Statistical Region	1.6	2.7	3.4	4.4	3.4
Eastern Adelaide Statistical Region	1.5	2.5	3.1	4.0	3.1
Southern Adelaide Statistical Region	1.8	2.5	3.1	4.0	3.1
Balance of South Australia Major Statistical Region	2.2	2.0	2.4	2.9	2.4
Northern and Western SA Statistical Region	2.4	2.8	3.4	4.4	3.4
Southern and Eastern SA Statistical Region	2.2	2.3	2.8	3.7	2.8

Perth Major Statistical Region	2.6	2.5	3.4	4.2	3.4
Central Metropolitan Statistical Region	1.4	3.3	4.8	6.3	4.8
East Metropolitan Statistical Region	2.1	3	4.5	5.9	4.5
North Metropolitan Statistical Region	1.9	2.9	4.3	5.7	4.3
South West Metropolitan Statistical Region	1.9	2.8	4.2	5.5	4.2
South East Metropolitan Statistical Region	2.5	3.1	4.5	5.9	4.5
Balance of Western Australia Major Statistical Region	2.8	2.3	3.2	4.0	3.2
Lower Western WA Statistical Region	2.6	2.6	3.8	5.0	3.8
Remainder-Balance WA Statistical Region	3.2	3.0	4.5	5.8	4.5
Greater Hobart-Southern Statistical Region Sector	1.1	1.1	1.2	1.4	1.2
Greater Hobart Statistical Division	0.6	1.0	0.7	1.4	1.1
Southern Statistical Division		1.7	1.9	2.5	1.9
Balance of Tasmania		1.2	1.3	1.6	1.3
Northern Statistical Region Sector	1.1	1.4	1.5	2.0	1.5
Mersey-Lyell Statistical Region Sector	1.1	1.4	1.6	2.0	1.6

---

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website - except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark - is licensed under a Creative Commons Attribution 2.5 Australia licence